- (1) GENERAL INFORMATION:
  - (i) APPLICANT: YOUNG, KATHLEEN H. RHODES, KENNETH J.
  - (ii) TITLE OF INVENTION: METHODS FOR IDENTIFYING MODULATORS OF N-TYPE ION CHANNEL INACTIVATION
  - (iii) NUMBER OF SEQUENCES: 23
  - (iv) CORRESPONDENCE ADDRESS:
    - (A) ADDRESSEE: AMERICAN HOME PRODUCTS CORPORATION
    - (B) STREET: FIVE GIRALDA FARMS -- ATTN. KAY E. BRADY
    - (C) CITY: MADISON
    - (D) STATE: NEW JERSEY
    - (E) COUNTRY: US
    - (F) ZIP: 07940
    - (v) COMPUTER READABLE FORM:
      - (A) MEDIUM TYPE: CD-R
      - (B) COMPUTER: IBM PC compatible
      - (C) OPERATING SYSTEM: WINDOWS NT
      - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
  - (vi) CURRENT APPLICATION DATA:
    - (A) APPLICATION NUMBER: US
    - (B) FILING DATE:
    - (C) CLASSIFICATION:
  - (viii) ATTORNEY/AGENT INFORMATION:
    - (A) NAME: GAVIN T. BOGLE
    - (B) REGISTRATION NUMBER:
    - (C) REFERENCE/DOCKET NUMBER: AHP 98133 P1
    - (ix) TELECOMMUNICATION INFORMATION:
      - (A) TELEPHONE: (617) 665-8079
      - (B) TELEFAX: (617) 876-5851
- (2) INFORMATION FOR SEQ ID NO:1:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 16 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: not relevant
    - (D) TOPOLOGY: not relevant
  - (ii) MOLECULE TYPE: peptide
  - (vi) ORIGINAL SOURCE:
    - (A) ORGANISM: Homo sapiens
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
  - Gln Ile Leu Gly Gln Thr Leu Lys Ala Ser Met Arg Glu Leu Gly Leu 1 5 10 15

- (2) INFORMATION FOR SEQ ID NO:2: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 16 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: not relevant (D) TOPOLOGY: not relevant (ii) MOLECULE TYPE: peptide (vi) ORIGINAL SOURCE: (A) ORGANISM: Homo sapiens (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2: Gln Ile Leu Gly His Thr Leu Arg Ala Ser Met Arg Glu Leu Gly Leu 10 5 (2) INFORMATION FOR SEQ ID NO:3: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 48 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3: 48 GATCCTGGGC CAGACCCTCA AAGCTAGTAT GAGAGAGCTA GGGCTGCT (2) INFORMATION FOR SEQ ID NO:4: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 48 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4: 48 GATCCTGGGC CACACCCTCA GAGCCAGCAT GCGGGAACTG GGCCTTCT
- (2) INFORMATION FOR SEQ ID NO:5:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 30 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: not relevant

		(D) TOPOLOGY: not relevant				
	(ii) 1	MOLECULE TYPE: peptide				
	(vi)	ORIGINAL SOURCE: (A) ORGANISM: Homo sapiens				
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:5:				
	Met (	Gln Val Ser Ile Ala Cys Thr Glu His Asn Leu Lys Ser Arg Asn 5 10 15				
	Gly	Glu Asp Arg Leu Leu Ser Lys Gln Ser Ser Thr Ala Pro 20 25 30				
(2)	INFOR	MATION FOR SEQ ID NO:6:				
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 30 amino acids  (B) TYPE: amino acid  (C) STRANDEDNESS: not relevant  (D) TOPOLOGY: not relevant				
	(ii) ]	MOLECULE TYPE: peptide				
	(vi)	ORIGINAL SOURCE: (A) ORGANISM: Homo sapiens				
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:6:				
	Met (	Glu Val Ala Met Val Ser Ala Glu Ser Ser Gly Cys Asn Ser His 5 10 15				
	Met	Pro Tyr Gly Tyr Ala Ala Gln Ala Arg Ala Arg Glu Arg 20 25 30				
(2)	INFOR	MATION FOR SEQ ID NO:7:				
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 90 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear				
	(ii)	MOLECULE TYPE: DNA (genomic)				
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:7:				
ATGCAAGTCT CCATAGCCTG CACAGAGCAC AATTTGAAGA GTCGGAATGG TGAGGACCGA 60						
CTTC	CTTCTGAGCA AGCAGAGCTC CACCGCCCCC 90					

<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 90 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:	
ATGGAGGTTG CAATGGTGAG TGCGGAGAGC TCAGGGTGCA ACAGTCACAT GCCTTATGGT	60
TATGCTGCCC AGGCCCGGGC CCGGGAGCGG	90
(2) INFORMATION FOR SEQ ID NO:9:	
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 59 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:	
CATGGAGCAG ATCCTGGGCC AGACCCTCAA AGCTAGTATG AGAGAGCTAG GGCTGTAAG	59
(2) INFORMATION FOR SEQ ID NO:10:	
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 59 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:	
GATCCTTACA GCCCTAGCTC TCTCATACTA GCTTTGAGGG TCTGGCCCAG GATCTGCTC	59
(2) INFORMATION FOR SEQ ID NO:11:	
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 55 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:	

CCGAATTCGA CATATGAAAA TGCAAGTCTC CATAGCCTGC ACAGAGCACA ATTTG

(2)	INFOR	RMATION FOR SEQ ID NO:12:	
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 42 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: DNA (genomic)	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:12:	
ACGG	SATCC	CC GAATTCCATT ATGATCTATA GTCCTTCTTG CT	42
(2)	INFO	RMATION FOR SEQ ID NO:13:	
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 45 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: DNA (genomic)	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:13:	
ACGC	GATCC	CC GAATTCCATT AATCTGAAAT TTGACCTCCA AATGT	45
(2)	INFO	RMATION FOR SEQ ID NO:14:	
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 59 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: DNA (genomic)	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:14:	
CATO	GGAGC	AG ATCCTGGGCC ACACCCTGAG AGCCAGCATG CGGGAACTGG GCCTTTAAG	59
(2)	INFO	RMATION FOR SEQ ID NO:15:	
	(i)	SEQUENCE CHARACTERISTICS:  (A) LENGTH: 59 base pairs  (B) TYPE: nucleic acid  (C) STRANDEDNESS: single  (D) TOPOLOGY: linear	
	(ii)	MOLECULE TYPE: DNA (genomic)	
	(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:15:	
GATO	CCTTA	AA GGCCCAGTTC CGGCATGCTG GCTCTGAGGG TGTGGCCCAG GATCTGCTC	59
(2)	INFO	RMATION FOR SEQ ID NO:16:	

<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 60 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:	
CGAATTCATA TGCGGATCCG TAGAATGGAG GTTGCAATGG TGAGTGCGGA GAGCTCAGGG	60
(2) INFORMATION FOR SEQ ID NO:17:	
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 41 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:	
GGTCGACGAA TTCGTTACCT TGCAGGATCG GAGCTCTCGT G	41
(2) INFORMATION FOR SEQ ID NO:18:	
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 59 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:	
CATGGAGCAG ATCCTGGGCC ACACCCTCAG AGCCAGCATG CGGCAACTGG GCCTTTAAG	59
(2) INFORMATION FOR SEQ ID NO:19:	
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 59 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:	
GATCCTTAAA GGCCCAGTTG CCGCATGCTG GCTCTGAGGG TGTGGCCCAG GATCTGCTC	59
(2) INFORMATION FOR SEQ ID NO:20:	

(i) SEQUENCE CHARACTERISTICS:

<ul><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:	
AATTCCAGAT CCTGGGCCAG ACCCTCAAAG CTAGTATGAG AGAGCTAGGG CTGTAAGCC	59
(2) INFORMATION FOR SEQ ID NO:21:	
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 59 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:	
TCGAGGCTTA CAGCCCTAGC TCTCTCATAC TAGCTTTGAG GGTCTGGCCC AGGATCTGG	59
(2) INFORMATION FOR SEQ ID NO:22:	
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 39 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:	
AGTAGGATCC CCATGCCAGT CTCCATAGCC TGCACAGAG	39
(2) INFORMATION FOR SEQ ID NO:23:	
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 39 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(ii) MOLECULE TYPE: DNA (genomic)	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:	
	20

(A) LENGTH: 59 base pairs